



```
CCCCCCCC LL      IIIIII MM      MM      AAAAAA CCCCCCCC
CCCCCCCC LL      IIIIII MM      MM      AAAAAA CCCCCCCC
CC        LL      II      MMMM  MMMM  AA      AA  CC
CC        LL      II      MMMM  MMMM  AA      AA  CC
CC        LL      II      MM  MM  MM  AA      AA  CC
CC        LL      II      MM  MM  MM  AA      AA  CC
CC        LL      II      MM  MM  MM  AA      AA  CC
CC        LL      II      MM  MM  MM  AA      AA  CC
CC        LL      II      MM  MM  MM  AA      AA  CC
CCCCCCCC LLLLLLLLLL IIIIII MM      MM      AAAAAA CCCCCCCC
CCCCCCCC LLLLLLLLLL IIIIII MM      MM      AAAAAA CCCCCCCC

MM      MM      AAAAAA RRRRRRRR
MM      MM      AAAAAA RRRRRRRR
MMMM  MMMM  AA      AA  RR      RR
MMMM  MMMM  AA      AA  RR      RR
MM  MM  MM  AA      AA  RR      RR
MM  MM  MM  AA      AA  RRRRRRRR
MM  MM  MM  AA      AA  RRRRRRRR
MM  MM  MM  AAAAAAAAAA RR      RR
MM  MM  MM  AAAAAAAAAA RR      RR
MM  MM  MM  AA      AA  RR      RR
MM  MM  MM  AA      AA  RR      RR
MM  MM  MM  AA      AA  RR      RR
MM  MM  MM  AA      AA  RR      RR
```

Version 'V04-000'

```
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```

INTERNAL MACRO TO ALLOCATE SPACE FOR A STRUCTURE

```

    .MACRO  $CLIALO SIZE
$CLI. = .
    .BLKB  SIZE
$CLI.. = .
    .ENDM

```

MACRO TO END THE STRUCTURE-RESTORE LOCATION BEYOND THE END

```

    .MACRO  $CLIEND
    . = $CLI..
    .ENDM

```

MACRO TO GENERATE A MASK FROM A LIST OF BITS

```

    .MACRO  $MASK  LIST,TYPE=BYTE,?L1
$$$ = 0
    .IF NB <LIST>
    .IRP  $$$ <LIST>
    $$$ = $$$.!<1$$$>
    .ENDR
    .ENDC
    .TYPE  $$$
    .ENDM

```

MACRO TO LOAD A VALUE INTO A STRUCTURE

```

    .MACRO  $CLISSET SYM,VAL,TYPE=B,IDX

```

```

    .IF NB <VAL>
      .IF B <IDX>
      . = $CLI.+CLIS'TYPE'SYM
      .IFF
      . = $CLI.+CLIS'IDX'SYM
      .ENDC
      .IF IDN <TYPE><B>
      .BYTE VAL
      .IFF
      .IF IDN <TYPE><A>
      .LONG <VAL-$CLI.>
      .IFF
      .IF IDN <TYPE><W>
      .WORD VAL
      .IFF
      .IF IDN <TYPE><M>
      .SMASK <VAL>
      .IFF
      .IF IDN <TYPE><L>
      .LONG VAL
      .IFF
      .ERROR ; INVALID DATA TYPE;
      .ENDC
      .ENDC
    .ENDC
  .ENDC
.ENDC
.ENDM

```

```

; MACRO TO SET UP VARIABLE LENGHT BIT LIST
;
;

```

```

; .MACRO $BITLST LIST,?L1
; . = $CLI..
; .IF B <LIST>
; .BYTE 0
; .IFF
; .BYTE L1-.-1
; .IRP $$$,<LIST>
; .BYTE $$$
; .ENDR
L1:
; .ENDC
$CLI.. =
; .ENDM

```

```

; MACRO TO GENERATE A CLI CALL BACK REQUEST DESCRIPTOR
;
;

```

```
.MACRO $CLIREQDESC RQTYPE,BITNUM,RQFLGS,ERRACT,RQSIZE,RQADR,-
      QUALST,PRSACT,ABSACT
```

```
.NLIST
$CLIDEF                                ; DEFINE VALUES FOR CLI
.LIST
```

```
$CLIALO CLISC_REQDESC
```

```
$CLISSET _RQTYPE,RQTYPE
$CLISSET _BITNUM,BITNUM
$CLISSET _RQFLGS,<RQFLGS>,M,B
$CLISSET _ERRACT,ERRACT,A
$CLISSET _RQSIZE,RQSIZE,W
$CLISSET _RQADR,RQADR,A
$CLISSET _QUALST,QUALST,A
$CLISSET _PRSACT,PRSACT,A
$CLISSET _ABSACT,ABSACT,A
```

```
$CLIEND
.ENDM
```

```
::
:: *** TEMP *** OLD NAME OF MACRO
::
```

```
.MACRO $CLIQUEALDEF QDCODE,QDFLGS,TRUACT,FLSACT,TSTLST,SETLST,CLRLST
$CLIQUEALDESC QDCODE,QDFLGS,TRUACT,FLSACT,TSTLST,SETLST,CLRLST
.ENDM
```

```
::
:: MACRO TO GENERATE A QUALIFIER DESCRIPTOR
::
```

```
.MACRO $CLIQUEALDESC QDCODE,QDFLGS,TRUACT,FLSACT,TSTLST,SETLST,CLRLST,?Z
```

```
.IF IDN <QDCODE><END_LIST>
```

```
.BYTE 0
```

```
.IFF
```

```
$CLIALO CLISC_QUALDEF
```

```
$CLISSET _QDBLKSIZ,<Z-.>
```

```
$CLISSET _QDCODE,QDCODE
```

```
$CLISSET _QDFLGS,<QDFLGS>,M,B
```

```
$CLISSET _TRUACT,TRUACT,A
```

```
$CLISSET _FLSACT,FLSACT,A
```

```
$BITLST <TSTLST>
```

```
$BITLST <SETLST>
```

```
$BITLST <CLRLST>
```

```
$CLIEND
```

```
Z:
```

```
.ENDC
```

```
.ENDM
```

```
::
:: MACRO TO GENERATED A COUNTED STRING FOR THE MATCHKEY SUBROUTINE
::
```

```
.MACRO $KEYWORD ST,?L1
```

CLIMAC.MAR;1

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L1: .BYTE L1--1  
.ASCII \ST\  
.ENDM

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VAX/VMS V4.0

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BCPR5DEF  
REQ

CVCLIBB  
LIS

INFO  
LIS

TYPE  
REQ

CHRSUB  
LIS

CVCLINUM  
LIS

SHODEVDEF  
REQ

CLIMAC  
MAR

CVCLIFRM  
LIS

DIGRAMS  
LIS

CALCMAX  
LIS

CLUTLMAC  
MAR

CUTLINE  
LIS

BCMDPRS  
LIS

SHOWDEF  
REQ

CREATE  
LIS